

Childhood Cancer - Latest Research [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 03/2014

ON THIS PAGE: You will read about the scientific research being done now to learn more about this type of cancer and how to treat it. To see other pages, use the menu on the side of your screen.

Doctors are working to learn more about childhood cancer, ways to prevent it, how to best treat it, and how to provide the best care to children diagnosed with this disease. The following areas of research may include new options for patients through [clinical trials](#) [3]. Always talk with your child's doctor about the diagnostic and treatment options best for your child.

Advances in treatment and follow-up care. The [Children's Oncology Group](#) [4] conducts large clinical trials for most types of pediatric cancer. It also conducts studies on quality of life and late effects of cancer after successful treatment. The [Childhood Cancer Survivor Study](#) [5] conducts long-term, follow-up studies of people who were treated many years ago to determine the late effects of childhood cancer and its treatment, so new treatments can be developed to avoid serious side effects. Other groups, including the [Pediatric Brain Tumor Consortium](#) [6] and the [New Approaches to Neuroblastoma Therapy Consortium](#) [7], perform studies of new drugs for specific types of cancer.

Reducing a child's exposure to radiation. Because children have an increased risk of developmental damage and second cancers from radiation therapy, doctors prefer to use radiation therapy less often whenever possible. In place of radiation therapy, doctors may use chemotherapy with a combination of drugs after surgery or use new drug combinations. Researchers are also investigating new techniques such as [proton therapy](#) [8] that more precisely focus radiation treatment at the tumor and not the surrounding healthy tissue.

Supportive care. Clinical trials are underway to find better ways of reducing other symptoms and side effects of current childhood cancer treatments in order to improve patients' comfort and quality of life. For example, drugs called filgrastim (Neupogen) and pegfilgrastim (Neulasta) may help patients produce more white blood cells after radiation treatment and chemotherapy. Doctors are also studying chemoprotective drugs that may help protect the body from the harmful effects of chemotherapy, especially [mucositis \(mouth sores\)](#) [9]. Additionally, this area of research includes studies in cardioprotection (protecting the heart and cardiovascular system from chemotherapy) and otoprotection (protecting against damage to the ear).

Looking for More About Latest Research?

If you would like additional information about the latest areas of research regarding childhood cancer, explore these related items that take you outside of this guide:

- To find clinical trials specific to your child's diagnosis, talk with the doctor or [search online clinical trial databases now](#) [10].
- Review research announced at [recent scientific meetings or in ASCO's peer-reviewed journals](#) [11].
- Visit ASCO's [CancerProgress.Net](#) [12] website to learn more about the historical pace of research for childhood cancer. Please note this link takes you to a separate ASCO website.

The next section addresses how to cope with the symptoms of the disease or the side effects of its treatment. Use the menu on the side of your screen to select [Coping with Side Effects](#), or you can select another section, to continue reading this guide.

Links:

[1] <http://www.cancer.net/cancer-types/childhood-cancer/latest-research>

[2] <http://www.cancer.net/about-us>

[3] <http://www.cancer.net/node/18695>

[4] <http://www.childrensoncologygroup.org/>

[5] <https://ccss.stjude.org/>

[6] <http://www.pbtc.org/>

[7] <http://www.nant.org/>

[8] <http://www.cancer.net/node/24521>

[9] <http://www.cancer.net/node/25051>

[10] <http://www.cancer.net/node/24878>

[11] <http://www.cancer.net/research-and-advocacy/research-summaries>

[12] <http://www.cancerprogress.net/>